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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/495,250      | 01/31/2000  | Jin Soo Lee          | CIT/K-108           | 4616             |

34610 7590 07/18/2003

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[REDACTED] EXAMINER

WOO, ISAAC M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2172     | 17           |

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                         |                  |
|------------------------------|-------------------------|------------------|
| <b>Office Action Summary</b> | Application No.         | Applicant(s)     |
|                              | 09/495,250              | LEE ET AL.       |
|                              | Examiner<br>Isaac M Woo | Art Unit<br>2172 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 May 2003.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4-11,13,14 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) 3, 12 and 15-20 is/are withdrawn from consideration.  
canceled.
- 5) Claim(s) 1-2 and 4-11 is/are allowed.
- 6) Claim(s) 13,14 and 21-26 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

**DETAILED ACTION**

1. Prosecution is being responded in accordance with MPEP 1208.02 as follows:
  
2. In view of the appeal brief filed on May 05, 2003, PROSECUTION IS HEREBY REOPENED. New ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

3. Claims are 1-2, 4-11, 13-14 and 21-26 are pending (claims 3, 12, and 15-20 are canceled). Claims 1-2 and 4-11 are allowed, and claims 13-14 and 21-26 are rejected based on new ground rejections.

***Claim Rejections - 35 USC § 102***

A person shall be entitled to a patent unless:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuperstein et al (U.S. Patent No. 6,128,398, hereinafter, "Kuperstein").

With respect to claim 13, Kuperstein discloses method of constructing a multimedia data, a feature information including features of an image, see (90, normalize feature sets, FIG. 2, col. 2, lines 63-67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5); and a weight information including weight information of the features, and weight information of the feature elements, see (col. 2, lines 63-67 to col. 3, lines 1-30).

With respect to claim 14, Kuperstein discloses the feature and the feature elements are represented by an image characteristic structure, global information which represents a feature of a whole image (facial image), see (FIG. 1, FIG. 2, col.1, lines 17-61, col. 2, lines 63-67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5); and spatial information which represents a feature of an image region (each feature from facial image, for instance, eyes, nose, mouth, etc), wherein the image

characteristic structure further comprises a weight information which represents the importance of the global information, see (FIG. 1, FIG. 2, col.1, lines 17-61, col. 2, lines 63-67 to col. 3, lines 1-30, col. 8, lines 40-67 to col. 9, lines 1-5).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binns et al (U.S. Patent No. 6,041,140, hereinafter, "Binns").

With respect to claims 21 and 24, Binns discloses the searching for a target image based on search criteria, inputting a first image that is similar to the target image, see (500, image data 1, FIG. 5, col. 9, lines 6-44); inputting a second image to the target image, see (510, image data 2, FIG. 5, col. 9, lines 6-44); and correlating the first image (500, image data 1, FIG. 5) and the second image (510, image data 2, FIG. 5) to construct the search criteria (col. 2, lines 13-35, col. 2, lines 50-67, FIG. 4, col. 8, lines 52-67 to col. 9, lines 1-5). Binns discloses the similarity of images. Binns does not explicitly disclose the dissimilar of image. However, disclosed

system of Binns is to get the similarity of images with correlation image rules. And when assume that, if the similarity is 90% stands for also that the dissimilarity is 10%. Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to include the dissimilar of image in the system of Binns to distinct the difference of images. Because the dissimilarity of images provides the improved images searching method with the similarity of images

With respect to claims 22-23 and 25-26, Binns discloses, identifying a feature that is common and not common between the first image and the second image; and decreasing and decreasing the weight of the identified feature in the search criteria, see (col. 2, lines 13-35, col. 2, lines 50-67, FIG. 4, col. 8, lines 52-67 to col. 9, lines 1-5).

### ***Allowable Subject Matter***

7. Claims 1-2 and 4-11 are allowed over prior arts. The following is a statement of reasons for the indication of allowable subject matter:

Due to claimed features in claims 1-2 and 4-11, and applicant's persuasive arguments with the appeal brief field on May 05, 2003, the claims 1-2, and 4-11 are allowed.

For the claims 1, the prior art (Jain et al, U.S. Patent No. 5,893,095) teaches a similarity engine for content-based retrieval of images. In column 12, lines 7-22,

it is disclosed that default primitives are Local Color (250), Global Color (252), Structure (254), and Texture (256). It is disclosed in column 12, line 8 that primitives and their weights are identified. However, there is no disclosure in Jain of determining and updating weights of each feature according to the similarity of the features and feature element and measuring the similarity of the features and feature element. Jain discloses a feature element of the disclosed primitives that are also weighted. In column 12, lines 34-36, a feature vector is disclosed. However, Jain does not disclose that the feature vector is weighted. And Jain does not disclose the searching for the specified multimedia data utilizing features and feature elements in consideration of the updated weights of features and feature elements.

Claims 2 and 4-11, further depending from the claim 1, are allowed with same reasons above.

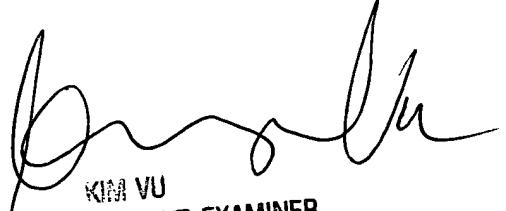
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW  
July 11, 2003



KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100